(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 9 September 2005 (09.09.2005)

PCT

(10) International Publication Number WO 2005/083576 A1

(51) International Patent Classification7:

G06F 13/00

(21) International Application Number:

PCT/US2004/002696

(22) International Filing Date: 30 January 2004 (30.01.2004)

(25) Filing Language:

English

(26) Publication Language:

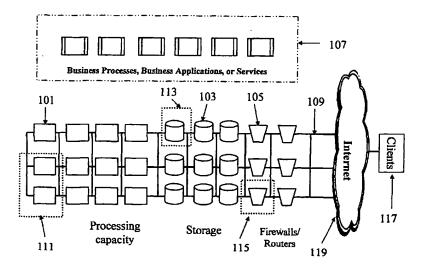
English

- (71) Applicant (for all designated States except US): INTER-NATIONAL BUSINESS MACHINES CORPORA-TION [US/US]; T.J. Watson Research Center, P.O. Box 218, Yorktown Heights, NY 10598 (US).
- (71) Applicants and
- (72) Inventors: EILAM, Tamar [IL/US]; 200 W. 109 Street, Apt. B6, New York, NY 10025 (US). HUNT, Guerney [US/US]; 31 Wellington Court, Yorktown Heights, NY 10598 (US). MILLER, Sandra, D. [GB/GB]; 15 Canute Road, Winchester, Hampshire SO23 0PW (GB). MUM-MERT, Lily, B. [US/US]; 18 Dreps Drive, Mahopac, NY 10541 (US).

- (74) Agent: HERZBERG, Louis, P.; TJ. Watson Research Center, Box 218, 1101 Kitchawan Rd., Yorktown Heights, NY 10598 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: HIERARCHICAL RESOURCE MANAGEMENT FOR A COMPUTING UTILITY



(57) Abstract: This invention provides for the hierarchical provisioning and management of a computing infrastructure which is used to provide computing services to the customers of the service provider that operates the infrastructure. Infrastructure resources can include those acquired from other service providers. The invention provides architecture for hierarchical management of computing infrastructures. It allows the dynamic provisioning and assignment of resources to computing environments. Customers can have multiple computing environments within their domain. The service provider shares its rescurces across multiple customer domains and arbitrates on the use of resources between and within domains. The invention enables resources to be dedicated to a specific customer domain or to a specific computing environment. Customers can specify acquisition and distribution policy which controls their use of resources within their domains.



V 92580/500C

WO 2005/083576 A1



Declaration under Rule 4.17:

 as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations

Published:

- with international search report

with amended claims

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.